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14818c LANCE Missile Number 4545 Round Number 359-APT		5. TYPE OF REPORT & PERIOD COVERED 6. PERFORMING ORG. REPORT NUMBER
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20. ABSTRACT (Cauthus as reverse etds if necessary a		
Meteorological data gathered for Number 4545, Round Number 359-Al	T the launching of PT presented in ta	the 14818C LANCE, Missile bular form.

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INTRODUCTION

14818c Lance	, Missile Number 4545	5 , Round Number 359-APT	.,
was launched from	LC 39 , White S	Sands Missile Range (WSMR), New	
Mexico, at <u>0800 N</u>	ADT on 3 October 1980	The scheduled launch time	
was <u>0800 MDT</u> .			

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

- 1. Observations
 - a. Surface
- (1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density (gm/m^3) , wind direction and speed, and cloud cover were made at the <u>"C" Station</u> met site at T-0 minutes.
- (2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.
 - b. Upper Air
- (1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE LC 39 3000 Meters

(b) Air structure data (rawinsonde) were collected at the following met sites. Data were collected from surface to as high as possible in 500-foot increments.

SITE	AND T	1ME
WSD	0750	MDT
APA	0630	MDT
JAL	0750	MDT

TABLE 1. Surface Observations taken at 0800 MDT, 3 October 1980, at LC-39, 14818c LANCE, Missile Number 4545, Round Number 359-APT.

ELEVATION	4021	FT/MSL
PRESSURE	886.8	MBS
TEMPERATURE	13.3	o _C
RELATIVE HUMIDITY	55	%
DEW POINT	4.4	o _C
DENSITY	1073	GM/M ³
WIND SPEED	03	KTS
WIND DIRECTION	110	DEGREES
CLOUD COVER	CLEAR	

PILOT BALLOON MEASURED WIND DATA

TABLE	3								
RELEASED	FROMLC	-39		DATE	3 October	1980		_TIME0800	MDT
	COOR	DINATES	(W	ISTM) X=	530,938.82	Y=_	186.564.96	H= 4063	.75
NOTE: W	IND DIRECTI	ONS ARE	RE	FERENCED	TO TRUE NOR	<u> TH</u> -			
HEIGHTS	ARE METERS	AGL_X_	0R	FEET AGL_	 •				
HE I GHT AGL	DIRECTION DEGREES	SPEED KNOTS		HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	140	02		1800	250	09			
60	170	03		1860	260	08			
120	130	06		1920	285	10			
180	145	10		1980	295	10			
240	145	11	ļ	2040	300	12			
300	160	09		2100	330	12			
360	180	10		2160	330	12			
420	190	08		2220	335	12			
480	210	06		2280	335	12			
540	235	07		2340	315	14			
600	205	06	i	2400	310	13			
660	195	09		2460	310	09_			_
720	175	09		2520	315	09		_	
780	180	11		2580	325	10			
840	170	14		2640	320	11			
900	185	15		2700	325	11			
960	185	10		2760	325	11			
1020	200	09		2820	335	13			
1080	220	07		2880	3 3 5	11			
1140	235	08		2940	340	11			
1200	250	07		3000	340	11			
1260	230	06							
1320	265	06							
1.380	265	06							
1440	260	07							
1500	260	06							
1560	245	06							
1620	240	09							
1680	235	09							
1740	225	10							

PILOT BALLOON MEASURED WIND DATA

TABLE	2										
RELEASED	FROMLC	-39		DATE	3 OCTOBER	1980	····		_TIME	0750	MDT
	COOR	DINATES	(W	STM) X=	530,938.82	Y=	186.	564.96	H= .	4063	.75
NOTE: W	IND DIRECTI	ONS ARE	RE	FERENCED	TO TRUE NORT	Н					
HEIGHTS	ARE METERS	AGL_X	OR	FEET AGL_	······································						
HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS		HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS		EIGHT GL	DIRECT DEGREE		SPEED KNOTS
SFC	180	02		1800	245	08					
60	130	01		1860	255	07					
120	140	04		1920	280	80					
180	145	12		1980	295	10					
240	155	12		2040	305	10					
300	155	13		2100	320	11					
360	160	12		2160	325	12					
420	175	09		2220	330	13					
480	190	06		2280	335	13					
540	220	06		2340	325	13					
600	210	06		2400	315	12					
660	195	07		2460	315	11					
720	190	80		2520	315	12					
780	185	11		2580	315	12					
840	180	13		2640	320	12					
900	180	12		2700	325	11					
960	195	10		2760	330	12					
1020	210	80		2820	335	13					
1080	230	07		2880	335	12					
1140	245	08		2940	345	20					
1200	245	07		3000	335	15					
1260	230	05									
1320	250	06									
1380	270	06									
1440	270	06									
1500	260	07									

GEODETIC COORDINATES 32,40043 LAT DEG 106,37033 LON DEG	REL.HUM.	ENT		0	0	0	0	0	0	C.	0	0	C.	•	0	C.	0	0	0	0	0	0	6	0											
۷ <u>-</u>	REL.	PERCENT		82.0	56.0	56.0	61.0	83.0	73.0	74.0	55.0	56.0	57.	36.0	5 6•	33.0	18.0	14.0	14.0	24.0	19.0	16.0	16.0	17.											
SIGNIFICANI LEVEL DAIA PATOCOGS32 WHITE SANDS TABLE 4	TEMPERATURE	DEWPOIL 1	DEGREES CENTIGRADE	7.8	5.1	8.2	6.2	9.6	9.6	7.5	2.1	٠.	•	-8.6	-16.7	-14.8	-23.0	-25.B	-30.6	-29.7	-35.6	-39.5	-#3.7	48.6											
Signification of the state of t	TEMPE	AIR	DEGREES	10.7	13.9	17.0	13.6	12.2	13.3	12.0	11.4	0.6	8•0	5.2	9.	٠.5	-1.9	-1.9	-7.9	-13.5	-17.6	-20.0	-25.3	-31.8	-36.1	-46.3	-56.1	-65.0	-66.2	-68.3	-68.2	-72.5	-74.2	6•69-	6-59-
MSL IDT	E GFOMETRIC	AL TITUDE	S MSL FEET	3989.0	4355.3	5157.1	6016.4	6n33.7	7718.8	8419.7	94746	10517.9	11258.5	12732.8	14569.0	14039.0	15691.5	16445.4	19393.0	21912.2	23533.0	24961.6	27305.5	29957.0	31760.7	35839.9	40619.2	45302.2	46495.3	49219.2	52326.5	54512.5	56376.4	57843.5	61509.3
STATION ALITYUE 3989.00 FEET MSL 3 OCT. 80 0750 HRS MDT ASCENSION NO. 532	PRESSURE		MILLIBARS	886.5	874.8	850 • 0	824.2	800.2	775.0	755.6	727.2	0.007	681.2	0.549	602.0	593.6	576.8	560•4	200.0	452.6	424.0	0.004	363.0	324.4	300.0	250.0	200.0	159.2	150.0	130.8	111.8	100.0	8.06	2·h8	70.0

ASL MDT
HRS I
3989.00 FEET / 0750 HRS
11100
N AL
STATION ALTITUDE 3 OCT. BO ASCENSION NO. 5

SIGNIFICÂNT LEVEL DATA 2770020532 WHITE SANDS

TABLE 4 (CONT)

TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET

62.0 52.8 50.0 35.2 30.0

63964.5 67241.3 68358.4 75677.5 79052.1

162.1 162.1 160.1 155.4 149.5

REL.HUM. PERCENT

GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON DEG

JPPER AIR DATA 27700205.32 WHITE SANDS TABLE 5 TABLE 5	DENSITY SPEED OF WIND DATA INDEX GM/CURIC SOUND DIRECTION SPEED OF METER KNOTS DEGREES(TN) KNOTS REFRACTION	1083.1 657.8 210.0 1.9 1.000291	65.0 196.8 3.8		661.2 188.7 9.3	660.4 189.6 8.8	660.2 190.8 8.1	660.9 209.9 5.3	929.1 660.5 221.6 4.0 1.000251 915.9 659.5 258.8 4.8 1.000251	658.9 263.9 5.6	658.4 272.7 6.1	657.0 280.0 6.7	655.6 303.1 8.1	654.8 317.9 10.3	653.7 325.2 10.8	652.4 331.5 11.3	651.2 336.2 10.8	2.1.6	14.0	645.1 348.5 15.9	643.5 348.2	642.3 343.4 15.8 1	641.8 337.7 14.6 1	641.6 329.7 12.7 1	640.4 326.9 11.7	639.2 357.2 12.2 1	638.0 345.6 13.1	6/4.9 6.46.8 351.8 14.2 1.000153
0750 HRS MDT	TEMPERATUPE REL, HUM. AIR DEWPOINT PERCENT DEGREES CENTIGRADE	10.7 7.8 82.0	5.8		* P.) P) • E	6.9	æ (12.0 7.2 72.6	5.0		1.7	٠.	€.	-1-3	~ ⇒	₩ ·	- 6- T	2.0 -14.1 29.1	-16.3		-20.5	-24.1	•	-26.7	-27.5	-28.3	-6.1 -29.2 14.0
STATION ALTITUDE 3989.00 FEET 3 OCT: 80 O750 HRS ASCENSION NO. 532	GEOMETRIC PRESSURE ALTITUDE MSL FEET MILLIBARS (3989.0 886.5 4000.0 866.1	-	5000.0 854.8					8500.0 755.4						_			14500.0	14000.0 615.0				•					9.710

STATION ALTITUDE 3989.00	TITUDE 39	89.00 FEET	ET MSL S MOT	_	UPPER AIR HATA 2770020532 WHITE SANGE	.ATA 32 .S		GEODETIC 32.0	GEODETIC COORDINATES
ASCENSION NO.	NO. 532			Ţ	TABLE 5 (CONT	ONT)		106.	106.37033 LON DEG
GEOMETRIC ALTITUDE	PRESSURE	TEMP	TEMPERATUPE R DEWPOINT	REL.HIJM. PERCENT	DENSITY GM/CUBIC	SPEEU OF	WIND DATA	TA SPEED	INDEX
MSL FEET	MILLIBARS		DEGREES CENTIGRADE		METER	KNOTS	DEGREES (TN)	KNOTS	REFRACTION
19500.0	497.9	-8.1	-30.5	14.4	654.3	634.3	350.2	11.2	1.000148
20000-0	488.1	-9.5	-30.1	16.4	644.1	633.0	349.1	1 1 . 4	1.000146
20500.0	478.6	-10.4	-29.8	18.4	634.2	_	348.3	14.6	1.000144
21000.0	7.69.5	-11.5	-20.7	20,4	n • 529	630,3	347.6	15.1	1.000142
21500.0	460.0	-12.6	9.62-	200	614.8		347.0	15.6	1.000140
225006.0	442.0	15.0	130.0		9600	627.6	347.6	17.2	1.000138
23000.0	433.2	-16.3	-33.6	20.6	587.3	_	348.5	18.1	1.000133
23500.0	454.6	-17.5	-35.4	19.1	578.4	_	348.9	18.9	1.000131
24000.0	416.0	-18.4	-36.7	18.0	568.7		349.1	20.0	1.000128
24500.0	401.6	-19.5	-38.0	17.0	559.1		349.3	21.2	1.000126
25000.0	399.4	-20.1	-39.3	16.0	248.7		348.7	21.4	1.000124
25500.0	391.2	-21.2	-40.3	16.0	540.8	618.4	347.8	21.2	1.000122
26000.0	383.2	-22.3	-41.2	16.0	532.1		346.9	20.5	1.000120
26500.0	375.3	-23.5	-42.1	16.0	523.6	_	346.0	18.8	1.000118
27000.p	367.6	-54.6	-43.1	16.0	515.2		347.9	17.7	1.000116
27500.0	360.0	125.8	0.23	16.1	506.9		351.2	16.6	1.000114
0.0002	2000	0.00	* # # # # # # # # # # # # # # # # # # #	101	0.00		355.1	10.0	2110001
29000-0	337.8	2.90.5	40.44 46.64	16.6	482.0		357.6	16.1	1.000110
29500.0	330.7	-30.7	1.7.7	16.8	475.2	606.7	358.8	16.0	1.000106
30000.0	323.8	-31.9	6.84-	16.6**	467.5		ů	16.4	1.000105
30500.0	316.9	-33.1	-52.1	11.9**	459.8		359.9	17.0	1.000103
31000.0	310.1	-34.3	-57.7	7.2**	452.2		353.6	17.8	1.000101
31500.0	303.4	-35.5	9•99-	2,5**	L. 444	9.009	347.5	20.2	1.000099
32000.0	296.8	-36.7			437.3		342.8	23.2	1.000097
32500.0	290.5	-37.9			459.9		341.2	24.7	1.000096
33000.0	283.8	-39.5			455.6		340.0	26.0	1.000094
33500.0	277.6	a.04-			415.5		339.0	27.3	1.000093
34000.0	271.4	-41.7			408.5		339.1	26.5	1.000001
34500.0	265.	-42.9			401.7		339.8	54.6	1.000089
22000.0	259.6	-44.2			394.9	589.5	341.4	23.3	1.000088

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUF WAS USED IN THE INTERPOLATION.

GEOMETHIC ALTITUDE	ASCENSION NO. 532								
MSL FEET	PRESSURE MILLIBARS	TEMPI AIR DEGREES (PRESSURE TEMPERATURE AIR DEWPOINT MILLIBARS DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SI DEGREES(IN) KI	SPEED KNOTS	INDEX OF REFRACTION
35500.0	253.8	-45.5			388.3	587.9	345.0	23.7	1.000086
36000.0	248.1	-46.6			381.6	586.3	348.5	24.1	1.000085
36500.0	242.4	-47.7			374.5	585.0	346.5	27.0	1.000083
37000.0	236.8	-48.7			367.5		349.7	59.9	1.000082
37500.0	231.4	1.64-			360.7		351.2	31.3	1.000080
38000.0	226.0	-50.7			354.0		352.9	32.0	1.000079
38500.0	220.8	-51.8			347.4	579.7	354.0	32.6	1.000077
39000.0	215.7	-52.8			341.0	578.3	353.8	32.8	1.000076
39500.0	210.7	-53.8			334.7		353.6	33.1	1.000075
40000.0	205.9	-54.8			328.5		352.9	32.9	1.000073
40200.0	201.1	-55.9		•	322.4		352.1	32.8	1.000072
41000.0	196.3	-56.8			316.2		351.8	31.7	1.000070
41500.0	191.6	-57.8			309.9	-	351.7	30.0	1.000069
42000.0	187.0	-58.7			303.8	570.5	352.0	29.0	1.000068
42500.0	182.5	-59.7			297.8		353.3	30.4	1.000066
43000.0	178.1	9.09-			291.9		354 • 5	31.7	1.000065
13500.0	173.8	-61.6			286.2		357.7	35.0	1.000064
0.00004	169.6	-62.5			280.6		6.	38.9	1.000062
0.00541	165.5	-63.5			275.0	564.1	3.9	42.3	1.000061
15000.0	161.6	1.49-			269.6		8.3	44.1	1.000060
15500.0	157.6	-65.2			264.1		12.3	46.2	1.000059
40000	153.8	-65.7			258.2		16.3	47.4	1.000058
46500.0	150.0	-66.2			252.4	560.4	20.5	47.8	1.000056
47000.0	146.2	-66.6			246.6	559.9	24.4	48.4	1.000055
47500.0	142.6	-67.0			241.0	•	23.0	47.4	1.000054
48000.0	139.1	-67.4			235.4	558.9	21.6	46.3	1.000052
+8500.0	135.6	-67.7			230.0		18.3	46.9	1.000051
19000+0	132.2	-68.1			224.7		74.4	t,8.4	1.000050
49500.0	129.0	-68.3			219.3	557.6	11.4	49.8	1.000049
0.00000	125.7	-68.3			213.8	557.6	10.4	50.5	1.000048
50500.0	122.6	-68.3			208.5	557.6	9•3	51.2	1.000046
51000.0	119.5	-68.2			203.2	557.7	7.3	8.64	1.000045

STATION ALTITA 3 OCT. BO ASCENSION NO.	STATION ALIITUDE 3989.00 3 oct. 80 Ascension no. 532	99.00 FEET MSL 0750 HKS MUT	TAB	UPPER AIR LAT 2770020532 WHITE SANDS	A1A 32 55 VT)		JEONETI 32. 106.	GEODETIC COORDINATES 32-40043 LAT DEG 106-37033 LON DEG	
GEOMETRIC ALTITUDE MSL FEET	PRESSURE HILLIBARS	PRESSURE TEMPERATURE AIR DEMPOINT MILLIBARS DEGREES CENTIGRADE	REL.HU1. DENSITY PERCENT GM/CUBI	U	SPEED OF SOUND KNOTS	WIND DATA DIRECTION S DEGREES(IN) K	TA SPEED KNOTS	IN EX OF REFRACTION	
51500.0	116.6	-68.2		198.2	557.7	3.6	45.9	1.000044	
52000.0	113.7	-68.2		193.2	-	359.4	42.3	1.000043	
52500.0	110.8	-68.5		188.7		352.0	40.5	1.000042	
53000.0	108.0	-69.5		184.8		342.8	39.8	1.000041	
53500.0	105.3	-70.5		181.0		333.6	40.4	1.000040	
54000.0	162.6	-71.5		177.3	553.2	330.7	41.3	1.000039	
54500.0	100.1	-72.5		173.7	551.9	328.4	42.2	1.000039	
55000.0	97.5	-72.9		169.7	551.2	328.1	42.0	1.000038	
55500.0	95.0	-73.4		165.7	550.6	334.4	34.5	1.000037	
56000.0	95.6	-73.9		161.8	-	341.8	35.5	1.000036	
56500.0	90.5	-73.8	•	157.7		350.1	33.4	1.000035	
57000.0	87.9	-72.4		152.6		359.2	32.3	1.000034	
57500.0	85.7	-70.9		147.6		0.9	31.7	1.000033	
58000.0	83.5	-69.1		143.1		7.4	31.0	1.000032	
58500.0	81.5	-69.5		139.1	556.4	8.8	30.3	1.000031	
59000.0	79.4	-68.6		135.3		14.8	29.8	1.000030	
29500.0	77.5	-68-1		131.6		21.5	29.6	1.000029	
0.0009	75.5	-67.5		128.0		56.4	29.5	1.000029	
60500.0	73.7	-67.0		124.5	559.4	29.0	29.0	1.000028	
61000.0	71.8	-66.5		121.0	560.1	31.7	28.6	1.000027	
61500.0	70.0	-65.9		117.7	560.8	27.7	27.3	1.000026	
62000.0	68.3	-65.1		114.4	561.9	22.7	26.2	1.000025	
62500.0	1.99	5-49-		111.2	562.9	20.5	24.4	1.000025	
63000.0	65.0	-63.6		108.1	564.0	23.9	21.5	1.000024	
63500.0	63.4	-62.8		105.1	565.0	28•3	18.6	1.000023	
64000.0	61.9	-62.1		102.2	566.0	35.1	15.9	1.000023	
64500.0	9.09	-62.2		4.66		9. 44	13.5	1.000022	
65000.0	58.9	-62.2		97.3		52.8	12.2	1.000022	
65500.0	57.5	-62.3		95.0		47.5	12.9	1.000021	
0.00099	56.1	-62.3		92.7	-	45.9	13.6	1.000021	
66500.0	54 • 8	-62.4		90.5		38.5	14.3	1.000020	
67000.0	53.4	-62.5		88.3		34.5	15.1	1.000020	

STATION ALTIF 3 OCT. BD ASCENSION NO.	STATION ALTITUDE 3989.00 FEET MSL 3 OCT. BO ASCENSION NO. 532 0750 HRS M	19.00 FEE	OO FEET MSL O750 HRS MDT	TA	UPPER AIR HATA 2770020532 WHITE SANDS TABLE 5 (CONT)	HATA 32 DS ONT)		GEODETI 32. 106.	GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON OEG	
GEUNETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMP AIR Degrees	TEMPERATUPE AIR DEWPOINT DEGREES CENTIGRADE	REL, HUM. DENSITY PERCENT GM/CUBI	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SI DEGREES(IN) KI	TA SPEED KNOTS	INDEX OF REFRACTION	
67500.0	52.1	-61.9			96.0	566.2	31.5	15.7	1.000019	
68000.0	50.9	6.09-			83.5		35.9	14.0	1.000019	
68500.0	49.7	-60.0			81.2		41.5	12.3	1.000018	
0.00069	48.5	-59.7			79.1		47.7	10.9	1.000018	
69500.0	47.3	-59.4			77.1		54.3	9.6	1.000017	
70000.0	46.2	-59.0			75.2		65.9	8.6	1.000017	
70500.0	45.1	-58.7			73.3	570.5	63.3	9.4	1.000016	
71000.0	44.1	-58.4			71.5		59.3	8.8	1.000016	
71500.0	43.0	-58.1			1.69	571.3	55.6	9.1	1.000916	
72000.0	45.0	-57.8			61.9		51.7	8.9	1.000015	
72500.0		-57.4			66.2		47.2	8+5	1.000015	
73000.0		-57.1			64.5		42.5	8.1	1.000014	
73500.0		-56.8			65.9		34.8	7.0	1.000014	
74000.0	38.1	-56.5			61.3	573.5	23.0	5.9	1.000014	
74500.0	37.2	-56.2			9.69		6.3	5.0	1.000013	
75000.0	36.4	-55.8			58.3		353.5	4.8	1.000013	
75500.0	35.5	-55.5			56.8	574.7	345.0	4.8	1.000013	
76000.0	34.7	-55.4			55.5		336.7	6.4	1.000012	
76500.0	33.9	-55.3			54.1		333.5	5.0	1.000012	
77000.0	33.1	-55.2			52.9		333.5	5.0	1.000012	
77500.0		-55.5			919		333.5	5.0	1.000011	
78000.0		-55.1			50.4		329.7	5.5	1.000011	
78500.0	30.8	-55.1			49.5		322.9	5,5	1.000011	
79000.0	30.1	-55.0			48.0	575.4	316.9	5.9	1.000011	
79500.0	29.4	-54.5			46.8		316.8	6.5	1.000010	
80000	28.7	-53.9			45.6	576.8	322.7	3.	1.000010	
80500.0		-53.4			+ + + +		327.2	8.3	1.000010	
8100C.0		-52.8			43.3	578.2	334.0	8.7	1.000010	
81500.0	26.8	-52.3			42.5		352.2	7.6	1.000009	
82000.0	26.1	-51.7			41.1	579.7	13.4	7.5	1.000009	
82500.0	25.5	-51.2			40.1				1.000009	
83000.0	54.9	-50.6			39.1				1.000009	

GEODETIC COORDINATES 32,40043 LAT DEG 106,37033 LON DEG	DEGREES(IN) KNOTS REFRACTION 1.000008
UPPER AIR LATA 2770020532 WHITE SANDS TABLE 5 (CONT)	ERCENT GM/CUBIC SOUND METER KNOTS 38.1 581.5
STATION ALTITUDE 3989.00 FEET MSL 3 OCT. 80 ASCENSION NO. 532 OT50 HRS MDT	GEONETHIC PRESSURE TEMPERATURE RALITUDE ALTITUDE AST DEWPOINT P MSL FEET MILLIBARS DEGREES CENTIGRADE 83500.0 24.4 ~50.1 84000.0 23.8 ~49.5
TATION ALTITUDE 3 3 OCT. BO SCENSION NO. 532	OMETHIC PRESSURE LITUDE L FEET MILLIBARS 83500.0 24.4 84000.0 23.8

ON ALTITUDE 3989,00 FEET MS! TT. 60 0750 HKS MUT	FEET MEI 50 HKS M	Tu	α Σ	MANDATORY LEVELS 2770020532 WHITE SANUS	:VELS 52 55		GEODETIC COORDINATES 32.40043 LAT DEG
510ti NO. 532				TABLE 6			106.37033 LON DEG
PRESSUR	PRESSURE GEOPOTI'NTIAL		TEMPE	TEMPERATURE	REL . HUM.		=
MILLIBARS	S FEET	DE GE	EFS C	DEGREES CENTIGRADE	PERCEN	DEGREES (TN)	SPEEU KNOTS
850.0	.0 5153,		17.0	8.2	56.	191.4	6.5
800			2.5	h•6	83.	190.4	5.8
750.0	.0 8617.		11.9	6.7	70.	260.2	6.4
700.0			0.6		56.	303.6	8.1
650.0			5.6	-7.3	39.		10.8
0.009		•	۳.	-16.1	28.		16.4
550			6.5	-26.6	14.		11.7
500.0	.0 19365.		-7.9	-30.6	14.		N++1
450			5.9	-30.2	24.		16.5
0.004			-20.0	-39.2	16.		21.4
350.0			-27.4	-45.2	16.		16.3
300			5.1				21.7
250	.0 35761.	146.3	V•3				24.0
200							32.7
175			.3				33.9
150.0	.0 46369.	966.2	N.			20.3	47.8
125			5.0				50.6
100			ů.				42.2
90.08		-68.8	æ.				59.9
101			6:				27.4
0.09			٠,				3.1
20			=				12.9
O#			:			42.7	8.1
30.0	.0 78714.	55.0	••			316.8	5•9
52							

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

10N NO. 42 0630 HRS MDT	4DT	APACHE TABLE 7	PACHE TABLE 7	; :	32.62700 LAT DEG 106.39352 LON DEG
PRESSURE		TEMPE	TEMPERATURE To DEWPOTAL	REL.HUM.	
MILLIBARS	MSL FEET	DEGREES	DEGREES CENTIGRADE		
987.9	3951.4	11.1	8.5	84.0	
873.8	4393.1	13.9	£.5	53.0	
850.0	5158.8	14.2		52.0	
817.0	6255.4	12.9	6.8	65.0	
906.0	6629.8	12.3	9.1	81.0	
190.8	7156.4	13.3	9 • 6	72.0	
752.6	8522.8	11.0	7.7	0.08	
732.0	9285.3	11.0		0.49	
700.0	10508.5	4.1	2.0	61:0	
663.4	11965.7	6.8	-7.2	36.0	
	15570.8	-2.1	p.02-	23.0	
	16348.1	9.2-	-26.4	14.0	
	16731.1	-2.5	-26.3	14.0	
	19381.8	-7-3	-30.5	14.0	
_	22330.0	-14.0	-28.9	27.0	
	23950.3	-18.8	-34.7	23.0	
	24955.7	-20.5	-39.1	17.0	
	30868.7	-33.4	4.64-	18.0	
	31756.6	-35.6			
-	33760.9	6.04-			
	35840.5	146.0			
	40629.4	-55.5			
	45094.1	t. ty-			
-	46517.2	-65.4			
	48939.3	-60.1			
	52163.5	-68.3			
	54518.7	-73.3			
	55713.4	-73.5			
	57047.4	-68.3			
_	61587.7	-63.5			
_	62234.1	-64.2			
65.0	63092.0	-61.5			

STATION ALTITUDE 3951.40 FEET MSL 3 OCT. 80 ASCENSION NO. 42 0630 HRS MDT

SIGNIFICANT LEVEL DATA 2770050042 APACHE

TEMPERATURE AIR DEWPOI, T OFGREES CENTIGRADE

REL.HUM. PERCENT

TABLE 7 (CONT)

GEODETIC COORDINATES 32.62700 LAT DEG 106.39352 LON DEG

PRESSURE GEONETRIC ALTITUDE MILLIBARS MSL FEET

-61.7 -59.2 -59.2 -56.5 -56.5 -62.5 -47.1 -47.1

65924.0 66807.3 68461.7 71604.7 74419.6 79201.6 83556.2 83797.2 89121.0 92364.3

56.6 524.2 50.0 43.0 43.0 37.6 37.6 24.4 119.0

PRESSURE MILLIBARS B87.9 B87.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B854.9 B858.3 B859.3	<u> </u>	ERATUPE DEWPOINT CENTIGRADE 0.5 A.2 4.5 4.5 5.2 6.1 8.3 8.3 8.2	REL.HUM. PERCENT 84.0 80.6 52.9 55.0	IABLE O DENSITY S GM/CUBIC METER 1083.0 1080.0 1052.3		WIND DATA	TA SPEED	INDEX
MILLIBARS MILLIBARS B87.9 B87.9 B86.3 B70.4 B70.4 B70.6 B7	^	ATURE INTIGRADE OSS OSS OSS OSS OSS OSS OSS OSS OSS OS	REL.HUM. PERCENT 84.0 82.9 52.2 55.0	0 000	SPEED OF SOUND	WIND DA	TA SPEED	INDEX
MILLIBARS BB 3 - 9 BB 3		NTIGRADE NTIGRADE A P S S S S S S S S S S S S S S S S S S	PERCENT 84.0 80.6 52.9 55.0	GM/CUBIC METER 1083.0 1080.0 1052.3	SOUND	TA LABOR	SPEED	
MILLIBARS BB 7.9 BB		N110RA 2000 0 4 4 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0	84.0 80.6 52.9 56.0	METER 1083.0 1080.0 1052.3		DIRECTION	,	Å
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 4 4 4 N 4 8 4 8 8 8 8 8 8 8 8 8 8 8 8 8	84.0 80.6 52.9 56.0	1083.0 1080.0 1052.3	KNOTS	DEGREES (TN)	KNOTS	REFRACTION
	46464444444444444444444444444444444444	4 4 4 M 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	80.6 52.9 56.0	1080.0	658.4	195.0	4.1	1.000293
	13.00 11.00 11.00 11.00 11.00 11.00	3 3 N V B C C C C	52.9 52.2 56.0	1052.3	658.7	192.0	£.4	1.000292
	13.0 13.0 13.0 13.0 13.0	**************************************	52.2 56.0		661.3	172.5	9•9	1.000273
	12 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9	56.0	1032.8	661.6	163.6	9.5	1.000269
	12.5 12.5 12.5 12.5 12.5	\$ \$ \$ \$ \$ \$ • \$ \$ \$ \$ \$ • \$ \$ \$ \$ \$		1015.2	661.2	158.8	12.0	1.000267
	12.5 13.0	8 K K K N O N O	62.0	8.866	660.7	162.1	11.2	1.000266
	13.0	8 8 9 0 8 0	75.5	982.5	660.1	172.7	8.7	1.000270
	12.7	3.5 3.5 3.5	74.7	963.0	660.8	191•6	5.8	1.000266
	0.11	8•0	74.0	L.945	4.099	227.2	†•	1.030262
			6.97	932.5	659.5	258 • 4	4.5	1.000258
	11.0	7.7	6.62	918.4	658.5	285.3	5.5	1.000254
	11.0	5.7	20.0	902.5	658.3	304.9	9. 4	1.000244
	10.7	0.4	63.5	887.7	657.7	307.8	7.1	1.000236
	6. 6	3.0	62.2	874.2	656.7	308-4	7.5	1.000231
	9•1	2•0	61.0	860.9	655.8	305.5	7.5	1.000225
	8.3	8.	52.6	848.1	9.459	307.9	7.9	1.000217
	7.5	-3.9	0.11	835.5	653.5	313.9	0.6	1.000208
	6.7	-7-3	35.9	823.1	652.4	322.9	9.5	1.000200
	5.5	1.6-	34.1	811.5	650.9	331.6	10.3	1.000196
	4.5	-10.8	32.3	800.0	4.649	337.4	11.8	1.000191
	3.0	-12.6	30.5	788.8	6.749	340.4	13.5	1.000187
	1.8	-14.5	28.7	777.7	646.4	341.7	15.5	1.000183
	ທຸ	-16.3	56.9	766.7	6.449	344.0	16.6	1.000179
	7	-18.2	25.1	755.9	643.3	348.4	16.6	1.000176
	-1.9	-20.1	23.3	745.3	_	350.1	15.2	1.000172
	-2.4	-23.4	18.0	732.6	_	347.4	12.0	1.000168
	-2.6	-56.3	14.0	719.2	641.0	331.9	10.7	1.000164
	-3.0	-26.7	14.0	706.6	640.5	332.6	11.2	1.000161
_	-3.9	-27.4	14.0	695.4	639.4	344.2	13.0	1.000158
	9	-28·1	14.0	684.4	638.3	351.8	14.7	1.000156
•	-5.7	-28.9	14.0	673.6	637.2	357.0	16.4	1.000153
19000.0	9.9-	-59.6	14.0	663.0	636.2	352.1	15.8	1.000150

STATION ALITHOL 3951.40	.0E 39	0630 HRS	1 MSL. S MDT	-	UPPER AIR A 2770050042 APACHE	A1A 42		SEODE T10	SECUETIC COOKDINATES 32.62700 LAT DEG	
ASCENSION	y y			TA	TABLE 8 (C	(00:11)		901	39332 LON DEG	
GEONE THIC	PRESSURE	TEMP	TEMPERATUME	PEL. Min.	DENS117	SPLED OF	WIND DATA	TA	INDEX	
ALT1TUDE		AIR	DEWPOINT	PERCENT	GM/CUBIC	SOUND	DIRECTION	SPEED	oF.	
MSL FELT	MILLIBARS		DEGREES CENTIGRADE		METER	KNOTS	DEGREES (TN)	KNOTS	REFRACTION	
19500.0	497.7	-7.6	-30.0	14.5	652.6	635.0	347.8	15.3	1.000148	
200002	487.9	-8.7	#•62-	16.7	642.5	Ī	346.4	14.3	1.000146	
20500.0	#•8/ t	8.6-	1-62-	9.9	632.6		346.0	13.9	1.000144	
21000.0	469.0	-11.0	-24.9	21.1	655.9	630.9	346.7	13.9	1.000142	
21500.0	459.8	-12.1	-24.8	23.3	613.4		341.9	14.4	1.000140	
22000.0	450.8	-13.2	-21.8	25.5	604.0	628.2	335.8	15.3	1.000138	
22500.0	442.0	-14.5	-27.5	56.6	595.0	626.7	333.6	15.6	1.000136	
23000.0	433.1	-16.0	-31.3	25.3	586.5		332.9	15.9	1.000133	
23500.0	424.5	-17.5	-33.1	24.1	578.1		336.3	16.0	1.000131	
24000.0	416.0	-18.9	-34.9	22.7	569.7		341.2	17.6	1.000129	
24500.0	407.5	-19.7	-37.0	19.7	560.1		346.0	20.8	1.000126	
25000.0	509.3	-20.6	-30.2	17.0	550.6	619.2	347.8	23.2	1.000124	
25500.0	300.9	-21.7	0.04-	17.1	541.5		348.4	54.9	1.000122	
26000.0	382.8	-22.8	6.04-	17.2	532.5	616.5	345.4	23.3	1.000120	
26500.0	374.8	-23.9	-41+9	17.3	523.7		343.3	21.7	1.000118	
27000.0	367.0	-25.0	9.24-	17.3	515.0		343.0	20.3	1.000116	
27500.0	359.3	-26.1	-43.5	17.4	506.5		344.9	18.5	1.000114	
28000.0	351.9	-27.1	70.77-	17.5	498.5		348.5	16.5	1.000112	
28590.0	344.5	-28.2	-45.3	17.6	0.064		354 • 1	17.2	1.000110	
29000.0	337.3	-29.3	-46.1	17.7	481.9	_	358.4	18.5	1.000108	
29500.0	330.3	-30.4	0.7.4	17.8	0.474	-	357.2	20.3	1.000106	
30000.0	323.4	-31.5	6.44-	17.9	466.2	605.6	355+0	21.5	1.000104	
30500.0	316.7	-32.6	-48.B	17.9	458.6		350.5	21.6	1.000103	
31000.0	310.0	-33.7	-51.1	15,3**	451.1	_	347.4	21.5	1.000101	
31500.0	303.4	-35.0	2.09-	5,2**	443.7		345.6	21.2	1.000099	
32000.0	296.8	-36.2			436.4		344.9	21.2	1.000097	
32500.0	290.3	-37.6			429.3	•	344.7	21.4	1.000096	
23000.0	284.0	-38.9			422.3	596.3	344.7	22,3	1.000094	
33200.0	277.8	-40.5	•		415.4	594.6	344.4	23.2	1.000093	
3#0n0.0	271.7	-41.5			408.5	•	343.5	24.0	1.00001	
34500.0	265.6	-42.7			401.5	591.4	342.8	24.2	1.000089	
35000.0	259.7	-43.9			394.7	589.8	342.4	23.9	1.000088	

** AT LEAST ONE ASSUMED RELATIVE HIMIDITY VALUE WAS USED IN THE INTERPOLATION.

10N AL	100	0630 HR	S MOT		APACHE	V		32.	32.62700 LAT DEG
ASCENSION NO.	NO. 42			}	TABLE 8 ((CONT)		106.	106.39352 LON DEG
SEUME TRIC	PRESSURE	TEMP	TEMPERATUPE	HEL.HIT.	REL. HITT. DENSITY	SPEEU OF	WIND DATA	TA	INDEX
ALTITUDE MSL FEET	MILLIBARS	AIR Degrees	AIR DEWPOINT MILLIBARS DEGREES CENTIGRADE	PERCENT	GM/CUBIC METER	SOUND KNOTS	DIRECTION DEGREES(IN)	SPEED KNOTS	OF REFRACTION
35500.0	253.9	-45.2			387.9	588.2	341.8	23.1	1.000086
30000°C	248.1	-46.3			381.1	586.7	341.0	22.5	1.000065
37000.0	236.9	7 P			367.0	584.2	338.8	28.7	1.000082
37500.0	231.4	-49.3			360.1	•	339.6	33.5	1.000080
\$8000.0	226.1	-50.3			353.4		341.1	35.5	1.000079
38500.0	220.9	-51.3			346.8		342.8	36.5	1.000077
33000.0	215.8	-52.3			340.3		343.5	35.8	1.000076
39500.0	210.8	-53.3			334.0		344.0	34.4	1.000074
0.0000	206.0	C + 20 - 1			327.8		3+44.5 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 +	32.6	1.000073
1000.0	196.4	2001			315.5	573.8	345	28.0	1.00007
0.005TH	1.161	-57.2			309.3		346.6	27.2	1.000069
42000.0	187.1	-58.2			303+3		346.4	29.1	1.000068
42500.0	182.6	-59.5			297.4		346.4	31.1	1.000066
43000.0	178.2	-60.2			291.6	568.5	348.2	34.7	1.000065
43500.0	174.0	-61.2			286.0		346.6	38.0	1.000064
0.000++	169.8	-62.2			280.4		353.1	39.1	1.000062
44500.0	165.7	-63.2			275.0		356.3	\$ · 0 *	1.000061
45000.0	161.7	-64.2			269.1		360.0	9.44	1.000060
45500.0	157.8	-64.7			263.7	562.5	7.5	47.4	1.000059
16000.0	153.9	-65.0			257.6		11.2	47.8	1.000057
16500.0	150.1	-65.4			251.7		17.2	47.4	1.000056
47000.0	146.4	-66.1			246.4		22.4	45.3	1.000055
47500.6	142.8	-66.9			241.1		24.8	43.B	1.000054
48000.0	139.5	-67.7			236.0		22.4	45.6	1.000053
48500.0	135.8	-68.4			231.0	557.4	19.5	42.1	1.000051
0.0006+	132.4	-69.1			226.0		16.0	42.7	1.000050
49500.0	129.1	-69.0			220.2	556.7	12.4	8.44	1.000049
200000	125.9	-68.8			214.6	556.9	9.1	49.2	1.000048
20200°	122.7	-68.7			209.1	557.0	7.2	51.4	1.000047
00001									

EOMETHIC PRESCRIT PRECENT SPECTOR OFFERTOR INDEX LITUDE ATR DEMONIAT PERCENT SPECTOR OFFERTOR INDEX SLITUDE ATR DEMONIATION PERCENT SPECTOR OFFERTOR OFFERTOR SLITUDE ATR DEMONIATION PERCENT SPECTOR OFFERTOR OFFERTOR SLITUDE ATR DEMONIATION SPECTOR OFFERTOR NATROL SPECTOR OFFERTOR SLITUDIO 113.7 -68.3 ATR 193.5 SPECTOR 47.4 1.0000042 SLITUDIO 113.7 -68.3 ATR 193.5 SPECTOR 47.4 1.0000040 SLITUDIO 113.7 -68.3 ATR 1.0000040 ATR ATR 1.0000040 SLITUDIO 113.7 -68.3 ATR ATR 1.0000040 ATR SLITOR 110.7 SSECTOR ATR ATR 1.0000040 ATR SLITOR ATR ATR <t< th=""><th>574710W ALTIT 3 OCT. 80 ASCENSION NO.</th><th>.11100E 399 0 NO. 42</th><th>STATION ALTITUME 3951.40 FEET MSL 3 OCT. 80 ASCENSION NO. 42 OG30 HRS MDT</th><th>TAI</th><th>UPPER AIR LATA 2770050042 APACHE TABLE 8 (CONT</th><th>R LATA OOUE (CONT)</th><th></th><th>JEODET1</th><th>GEODETIC COORDINATES 32.62700 LAT DEG 106.39352 LOW DEG</th><th></th></t<>	574710W ALTIT 3 OCT. 80 ASCENSION NO.	.11100E 399 0 NO. 42	STATION ALTITUME 3951.40 FEET MSL 3 OCT. 80 ASCENSION NO. 42 OG30 HRS MDT	TAI	UPPER AIR LATA 2770050042 APACHE TABLE 8 (CONT	R LATA OOUE (CONT)		JEODET1	GEODETIC COORDINATES 32.62700 LAT DEG 106.39352 LOW DEG	
116.7 -68.5 198.5 557.4 5.2 47.4 113.7 -68.3 193.5 557.5 35.9 53.1 110.1 -70.1 185.4 555.5 359.5 35.1 110.1 -70.1 181.7 55.2 349.5 35.1 110.1 -72.2 170.1 181.7 55.2 349.5 31.3 110.1 -73.3 170.1 180.6 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0 41.0 30.3 41.0 41.0 41.0 41.0	SEUNETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS		REL.HUM. PERCENT	ن	SPEED OF SOUND KNOTS	WIND DA DIRECTION DEGREES(IN)	SPEEU KNOTS	INDEX OF REFRACTION	
113.7 -68.3 193.5 557.5 33.2 41.1 110.1 -69.0 190.2 555.6 359.5 35.1 110.1 -71.1 181.7 555.6 359.5 35.1 110.1 -73.2 170.1 180.7 357.2 28.7 110.1 -73.3 170.1 550.5 350.4 350.3 100.1 -73.4 170.1 560.6 325.0 41.8 92.6 -72.4 160.7 550.5 35.5 41.8 92.6 -72.4 160.7 550.5 35.5 41.8 92.6 -72.4 160.7 550.5 35.5 41.8 90.3 -70.4 165.8 350.5 35.5 41.8 90.4 -66.8 141.7 559.0 35.0 41.8 85.8 -66.8 141.7 559.0 35.0 41.9 85.9 -66.8 141.7 559.0 35.0 45.0 83.7 -66.2 130.8 551.0 55.0 55.0 72.1	51500.0	116.7	-68.5		198.5		5.2	4.7.4	1.000044	
110.9 -69.0 189.2 556.6 555.5 359.5 35.1 106.1 -70.1 185.2 347.2 267.2 37.2 267.2 107.7 -72.2 174.4 550.6 327.0 36.0 100.1 -73.4 170.1 550.6 327.0 41.8 95.0 -73.4 170.1 550.6 327.0 41.8 95.0 -73.4 165.8 550.6 327.0 41.8 95.0 -73.4 165.8 165.8 355.9 41.8 90.3 -70.4 165.8 552.0 340.1 50.6 90.4 -67.8 145.9 552.0 345.0 45.0 85.0 -67.8 145.0 552.0 345.0 45.0 81.7 -66.8 141.7 559.0 350.7 460.0 81.7 -66.8 141.7 559.0 450.0 460.0 81.7 -66.8 141.7 559.0 550.0 550.0 550.0 81.7 -65.7 126.5 550.0 550	52000.0	113.7	-68.3		193.5		3.2	41.1	1.000043	
108.1 -70.1 108.4 555.2 349.5 31.3 105.3 -71.1 108.7 552.7 347.2 28.7 102.1 -72.4 170.1 550.8 327.0 36.0 95.0 -73.4 170.1 550.6 327.0 45.9 95.0 -73.4 170.1 550.6 327.0 45.9 95.0 -73.4 160.7 552.0 340.1 50.0 96.8 -67.8 160.7 552.0 340.1 45.9 96.9 -67.8 145.6 589.7 345.6 45.9 83.7 -66.8 145.6 589.7 356.7 46.9 81.7 -66.8 141.7 559.0 35.9 45.9 81.7 -66.8 144.1 569.0 35.9 45.9 81.7 -66.8 145.6 589.7 35.9 46.9 81.7 -66.8 147.7 559.0 35.9 46.9 81.7 -66.8 156.7 156.7 156.7 156.7 75.8	52500.0	110.9	0.69-		189.2		359.5	35.1	1.000042	
106.3 -71.1 107.3 -72.2 107.1 -72.2 107.1 -73.3 100.1 -73.5 100.1 -73.5 100.1 -73.5 100.2 -73.5 100.1 -73.5 100.2 -73.5 100.1 -73.5 100.2 -73.5 100.3 -73.5 100.4 -73.5 100.7 -68.5 100.8 -55.0 100.9 -68.5 100.9 -68.5 100.9 -68.5 100.9 -68.5 100.9 -69.0 100.9 -69.0 100.9 -69.0 100.9 -69.0 100.9 -69.0 110.1 -69.0 110.2 -69.0 110.2 -69.0 110.2 -69.0 110.2 -69.0 110.2 -69.0 110.2 -69.0 110.2 -69.0 11	53000.0	1.861	-70.1		1.85.4		349.5	31.3	1.000041	
102.7 -72.2 178.2 328.4 30.3 1001 -73.3 174.4 550.8 327.0 36.0 1001 -73.5 178.4 170.8 35.0 41.8 95.0 -73.4 170.1 165.8 550.6 353.5 41.8 92.6 -72.4 160.7 552.0 340.1 50.6 41.8 90.3 -70.4 160.7 552.0 340.1 48.8 48.8 89.0 -68.8 145.6 558.2 356.7 40.9 46.0 46.0 48.8 48.9 48.9 48.9 48.9 48.9 48.9 48.9 48.9 48.9 48.9 48.9	53500.0	105.3	-71.1		181.7		337.2	28.7	1.000040	
100.1 -73.3 174.4 550.6 327.0 36.0 97.5 -73.4 160.7 550.6 325.9 41.8 95.6 -72.4 160.7 550.6 340.1 50.6 90.3 -70.4 160.7 552.0 340.1 50.6 90.3 -70.4 160.7 552.0 340.1 50.6 85.8 -67.8 140.6 552.0 340.1 50.6 80.9 -67.8 145.6 559.2 35.7 46.8 81.7 -66.8 141.7 559.2 35.7 46.9 81.7 -66.8 141.7 559.7 35.9 46.9 81.7 -66.8 141.7 559.7 35.9 46.9 81.7 -65.2 130.4 56.1 15.0 37.9 81.7 -65.2 120.4 60.4 40.5 31.3 81.6 -65.2 120.4 56.1 15.0 27.9 81.6 -65.2 120.4 56.1 27.9 26.7 81.6 -65.	24000.0	102.7	-72.2		178.0		328.4	30.3	1.000040	
95.0 -73.4 95.0 -73.4 95.0 -73.5 96.0 -73.5 96.0 -73.5 90.1 -72.4 90.2 -70.4 90.3 -70.4 90.4 -68.5 90.5 -70.4 90.6 -67.8 90.7 -67.8 90.8 -67.8 90.9 -67.8 90.9 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.2 10.0 -66.3 10.0 -66.4 10.0 -66.4 10.0 -66.5 10.0 -66.5 10.0 -66.5	54500.0	1.001	-73.3		174.4		327.0	36.0	1.000039	
95.0 -73.5 95.0 -73.5 95.6 -72.4 90.3 -73.5 92.6 -72.4 90.3 -73.4 90.3 -73.4 90.0 -68.5 92.6 -72.4 90.0 -68.5 92.6 -72.4 90.0 -68.5 95.0 340.1 95.0 340.1 95.0 340.1 95.0 340.1 95.0 957.3 95.0 40.0 95.0 145.0 959.7 95.0 66.9 95.0 145.0 95.0 95.0 15.0	55000.0		-73.4		170.1		325.9	41.8	1.000038	
92.6 -72.4 160.7 552.0 340.1 50.6 90.3 -70.4 1552 554.7 345.6 48.8 88.0 -68.5 -68.5 145.6 554.7 345.6 48.8 83.7 -67.3 81.7 559.0 350.7 40.9 83.7 -66.2 145.6 556.2 356.7 40.9 83.7 -66.2 145.6 556.2 356.7 40.9 35.9 141.7 559.0 -9 36.4 40.9 130.5 56.1 15.0 20.7 15.8 -65.2 15.2 150.4 150.9 561.8 16.4 27.9 77.7 -64.1 120.9 561.8 16.4 27.9 77.7 -64.1 120.9 561.8 16.4 27.9 77.7 -64.1 110.9 561.8 16.4 27.9 26.2 25.7 25.7 25.7 25.7 25.7 25.7 25.7 25	55500.0		-73.5		165.8		333.5	45.9	1.000037	
90.3 -70.4	56000.0	95.6	-72.4		160.7	•	340.1	50.6	1.000036	
88.0 -68.5 149.6 557.3 351.6 45.0 85.8 -67.8 145.6 558.2 356.7 40.9 83.7 -66.8 137.8 559.0 9 35.9 77.7 -66.2 137.8 559.7 5.5 32.9 77.7 -65.7 130.5 561.1 12.0 25.9 77.7 -65.2 126.9 561.1 12.0 25.9 77.7 -65.2 126.9 561.1 12.0 25.9 75.8 -65.2 126.9 561.1 12.0 25.7 72.1 -64.6 126.9 561.8 16.4 27.9 72.1 -64.1 126.9 562.5 22.7 25.7 72.1 -64.1 116.9 564.0 24.5 25.7 66.9 -63.4 114.2 563.5 22.7 25.7 66.9 -63.4 114.2 56.5 22.7 25.7 65.1 -61.6 114.2 56.5 22.7 25.6 65.2 -61.6	56500.0	90.3	-70.4		155.2		345.6	48.8	1.000035	
85.8 -67.6 83.7 -67.3 83.7 -67.3 81.7 -66.8 81.7 -66.8 81.7 -66.8 77.7 -66.9 75.8 -65.2 75.9 -64.6 75.9 -64.6 73.9 -64.6 72.1 -65.2 72.1 -64.1 72.2 -64.6 72.1 -64.6 72.1 -64.1 72.2 -64.1 72.3 -64.6 72.4 -64.6 72.5 -64.6 72.1 -63.2 72.2 -63.4 66.9 -63.4 66.9 -63.4 65.1 114.2 65.2 22.7 65.3 -61.6 65.4 -61.6 65.5 -61.6 65.1 107.6 65.2 -61.6 60.7 -61.6 60.7 -61.6 60.7 -61.6 <	57000.0	88.0	-68.5		149.8		351.6	45.0	1.000033	
83.7 -67.3 141.7 559.0 .9 36.4 81.7 -66.8 137.8 559.7 5.3 32.9 79.6 -66.2 137.8 560.4 8.5 32.9 77.7 -65.2 126.9 561.4 120 29.7 75.8 -65.2 126.9 561.4 120 29.7 75.9 -64.6 123.5 562.5 21.0 29.7 75.1 -64.1 123.5 562.5 22.7 27.9 70.1 -64.1 116.9 564.0 24.5 25.2 68.6 -63.9 111.1 564.3 26.5 23.9 66.9 -63.9 111.1 564.3 26.5 23.9 65.3 -61.8 107.6 560.4 42.3 17.2 65.4 -61.6 99.9 566.7 50.6 15.6 60.7 -61.6 97.5 566.0 53.6 16.7 56.4 -61.6 97.5 566.0 53.1 17.2 55.0 -61.6	57500.0	85.8	-67.8		145.6		356.7	6.04	1.000032	
81.7 -66.8 137.8 559.7 5.5 32.9 79.6 -66.2 134.1 561.4 8.5 31.3 77.7 -65.2 126.9 561.8 16.4 27.9 75.8 -65.2 126.9 561.8 16.4 27.9 72.1 -64.6 123.5 562.5 22.7 25.2 70.3 -64.6 126.9 22.7 25.2 68.6 -63.6 116.9 264.0 26.2 25.2 68.6 -63.4 116.9 264.0 26.5 23.9 66.9 -63.4 116.9 264.3 26.5 23.9 65.3 -61.8 107.6 564.3 26.5 23.9 65.3 -61.6 107.6 56.4 33.8 20.1 60.7 -61.6 99.9 566.7 50.6 15.6 59.2 -61.6 99.9 566.6 53.2 16.1 57.8 -61.6 97.5 566.6 53.6 16.1 56.0 -61.7 96.6	58000.0	83.7	-67.3		141.7		σ•	36.4	1.000032	
79.6 -66.2 134.1 560.4 6.5 31.3 77.7 -65.7 126.9 561.1 16.4 27.9 75.8 -65.2 126.9 561.8 16.4 27.9 72.1 -64.6 123.5 562.5 21.0 26.2 72.1 -64.1 120.1 562.5 21.0 26.2 72.1 -64.6 116.9 564.0 22.7 25.7 66.9 -63.4 114.2 564.0 24.5 25.2 65.3 -61.8 111.1 564.3 28.7 25.2 65.3 -61.8 107.6 560.4 35.8 27.1 62.2 -61.6 99.9 566.7 42.3 17.2 60.7 -61.6 99.9 566.6 55.6 16.1 57.8 -61.6 97.5 566.6 55.6 16.1 57.9 -61.6 97.5 566.6 55.1 17.2 55.0 -61.8 96.5 56.5 55.6 16.1 55.0 -61.6	58500.0	81.7	-66.8		137.8		5.3	32.9	1.000031	
77.7 -65.7 77.8 -65.2 75.8 -65.2 75.9 -64.6 73.9 -64.6 72.1 -64.6 72.1 -64.1 72.1 -64.6 72.2 -63.2 68.6 -63.9 66.9 -63.9 66.9 -63.4 65.1 111.1 66.9 -63.9 66.9 -63.6 65.1 111.1 66.9 -63.9 66.9 -63.9 70.1 111.1 70.2 26.5 70.1 111.1 70.2 26.5 70.1 107.4 70.2 107.2 70.2 107.2 70.2 107.2 70.2 107.2 70.2 107.2 70.2 107.2 70.2 107.2 70.1 107.2 70.1 17.2 70.1 17.2 70.1 17.2 70.1 17.2 70.1 17.2 70.1 17.2 70.1 17.3 70.1 17.3 70.1	59000.0	79.6	-66.2		134.1		8.5	31.3	1.000030	
75.8 -65.2 73.9 -64.6 123.5 561.8 16.4 27.9 73.9 -64.6 123.5 562.5 21.0 26.2 70.3 -64.1 116.9 563.2 22.7 25.7 70.3 -63.9 111.1 564.0 24.5 25.2 65.9 -63.4 111.1 564.3 26.5 23.9 65.9 -63.4 111.1 564.3 26.5 23.9 65.1 -61.8 111.1 564.3 26.5 23.9 62.2 -61.6 104.9 566.7 42.3 17.2 60.7 -61.6 99.9 566.6 53.6 16.1 57.8 -61.6 97.5 566.6 55.6 16.7 56.4 -61.8 97.5 566.6 55.6 16.7 55.0 -61.8 97.5 566.6 55.6 17.2 55.0 -61.8 93.0 56.5 43.0 17.3 55.0 -62.7 86.3 56.4 16.9	29500.0	77.7	-65.7		130.5		12.0	29.1	1.000029	
73.9 -64.6 123.5 562.5 21.0 26.2 72.1 -64.1 120.1 563.2 22.7 25.7 70.3 -63.6 116.9 564.0 24.5 25.2 66.9 -63.4 111.1 564.3 26.5 23.9 65.3 -61.8 107.6 560.4 33.8 20.1 63.7 -61.5 104.9 566.7 42.3 17.2 60.7 -61.6 99.9 566.7 42.3 15.6 60.7 -61.6 97.5 566.6 53.2 16.1 57.8 -61.6 97.5 566.6 53.2 16.1 55.0 -61.7 97.5 566.6 53.2 16.1 55.0 -61.8 97.5 566.6 53.1 17.2 55.0 -61.8 97.5 566.5 53.1 17.2 55.0 -61.8 91.1 565.3 43.0 17.3 55.0 -62.7 98.9 566.3 50.6 17.3 55.0 -65.3	60000.0	75.8	-65.2		126.9		16.4	27.9	1.000028	
72.1 -64.1 72.1 -64.1 70.3 -63.6 68.6 -63.4 66.9 -63.4 66.9 -63.4 66.9 -63.4 65.3 -61.8 65.3 -61.8 67.2 -61.6 60.7 -61.6 60.7 -61.6 79.2 -61.6 79.2 -61.6 79.2 -61.8 55.9 -62.7 55.0 -62.7 55.0 -62.7 55.0 -62.7 58.9 55.1 77.2 77.2 77.2 77.2 77.2 77.2 77.2 77	60500·n	73.9	9.49-		123.5		21.0	26.2	1.000027	
70.3 -63.6 116.9 564.0 24.5 25.2 68.6 -63.9 111.1 564.3 26.5 23.9 66.9 -63.4 111.1 264.3 28.7 23.9 65.3 -61.8 107.6 56.4 33.8 20.1 63.7 -61.6 104.9 566.7 42.3 17.2 60.7 -61.6 99.9 566.6 53.2 16.1 57.8 -61.6 97.5 566.6 55.6 16.1 57.8 -61.7 93.0 566.5 53.1 17.2 56.4 -61.7 93.0 566.5 53.1 17.2 56.4 -61.7 93.0 56.5 53.1 17.2 55.0 -62.7 93.0 56.3 50.6 17.3 53.7 -62.7 88.9 565.1 32.4 16.9	61000.0	72.1	-64.1		120.1		22.7	25.7	1.000027	
68.6 -63.9 114.2 563.5 26.5 23.9 66.9 -63.4 111.1 564.3 28.7 22.6 65.3 -61.8 107.6 56.4 33.8 20.1 63.7 -61.5 60.7 -61.6 102.4 566.7 50.6 15.6 60.7 -61.6 99.9 566.6 53.2 16.1 57.8 -61.6 99.9 566.6 53.2 16.1 57.8 -61.7 56.4 -61.8 93.0 565.5 53.1 17.2 56.4 -61.8 93.0 565.3 50.6 17.7 55.0 -62.7 88.9 565.1 32.4 16.9	61500.0	70.3	-63.6		116.9		24.5	25.2	1.000026	
66.9 -63.4 111.1 564.3 28.7 22.6 65.3 -61.8 107.6 56.4 33.8 20.1 65.3 -61.5 56.4 33.8 20.1 107.2 62.2 -61.6 50.4 102.4 566.7 50.6 15.6 60.7 -61.6 59.2 -61.6 57.8 -61.7 56.4 55.0 17.2 56.4 -61.8 55.0 17.2 55.4 -61.8 55.0 17.3 55.0 -62.7 55.0 17.3 55.0 55.1 17.2 55.0 -62.7 56.0 55.1 17.2 55.0 16.1 57.2 55.0 -62.7 56.0 55.1 17.3 55.0 17.3 55.0 17.3	62000.0	9.89	-63.9		114.2		26.5	23.9	1.000025	
65.3 -61.8 107.6 560.4 33.8 20.1 1 1 63.7 -61.5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	62500.0	6.99	1-63.4		111.1		28.7	22.6	1.000025	
63.7 -61.5 62.2 -61.6 60.7 -61.6 60.7 -61.6 59.2 -61.6 59.2 -61.6 59.2 -61.6 57.8 -61.7 56.4 -61.7 56.4 -61.7 55.0 -62.7 53.7 -62.7 53.7 -62.7 53.7 -62.7	63000.0	65.3	-61.8		107.6	560.4	33.8	20.1	1.000024	
62.2 -61.6 102.4 566.7 50.6 15.6 1 60.7 -61.6 99.9 566.6 53.2 16.1 1 59.2 -61.6 97.5 566.6 55.6 16.7 1 57.8 -61.7 93.0 566.5 53.1 17.2 1 56.4 -61.8 93.0 566.3 50.6 17.2 1 55.0 -62.7 38.9 565.1 32.4 16.9 1	63500.0	63.7	-61.5		104.9		42.3	17.2	1.000023	
60.7 -61.6 99.9 56.6 53.2 16.1 1 59.2 -61.6 97.5 566.6 55.6 16.7 1 57.8 -61.7 95.2 566.5 53.1 17.2 1 56.4 -61.8 93.1 566.3 50.6 17.7 1 55.0 -62.7 91.1 565.2 43.0 17.3 1 53.7 -62.7 38.9 565.1 32.4 16.9 1	0.00049	62.2	-61.6		102.4		9.09	15.6	1.000023	
59.2 -61.6 55.6 16.7 56.6 55.6 16.7 55.4 -61.7 55.4 -61.8 55.4 17.2 55.0 -62.7 81.1 565.2 43.0 17.3 53.7 -62.7 88.9 565.1 32.4 16.9	0.00549	2.09	-61.6		6.66		53.2	16.1	1.000022	
57.8 "61.7 56.4 "61.8 56.4 "61.8 55.0 "62.7 53.7 "62.7 88.9 565.1 32.4 16.9	65000.0	59.5	-61.6		97.5	۳.	55.6	16.7	1.000022	
56.4 -61.8 50.6 17.7 55.0 -62.7 91.1 565.2 43.0 17.3 55.7 -62.7 88.9 565.1 32.4 16.9 5	65500.0	57.8	-61.7		95.2		53.1	17.2	1.000021	
55.0 -62.7 91.1 565.2 43.0 17.3 1 53.7 -62.7 88.9 565.1 32.4 16.9 1	0.00099	56.4	-61.8		93.0		9.05	17.7	1.000021	
53.7 -62.7 88.9 565.1 32.4 16.9	66500.0	55.0	-62.7		91.1	565.2	43.0	17.3	1.000020	
	67000.0	53.7	-62.7		88.9	-	32.4	16.9	1.000020	

GEODETIC COORDINATES 32.62700 LAT DEG 106.39352 LON DEG	•	INDEX	oF	REFRACTION	1.000019	1.000019	1.000018	1.000018	1.000017	1.000017	9100001	1.000015	1.000015	1.000015	1.000014	1.000014	1.000014	1.000013	1.000013	1.000013	1.000012	1.000012	1.000012	1.000012	1.000011	1.00001	1.000011	1.000010	1.000010	1.000010	1.000010	1.000009	1.000009	1.000009	1.000009
6E00ET1	•	TA	SPEED	KNOTS	16.9	16.9	16.6	13.6	10.9	- ·		9	7	6.3	2.5	3.9	2.5	1.5	1.4	2.5	3.8	5.5	6.5	7.4	8.3	9.1	6.6	10.8	10.9	10.0	9.6	5.8	1.6	3.8	6•9
		WIND DATA	DIRECTION	DEGREES (TN)	25.2	23.4	22.3	29.5	39.5	4 / 14	7.5.7	105.9	132.6	135.9	140.5	139.8	120.2	58.9	355.2	319.2	309.3	309.0	308.9	305.5	301.5	299.5	305.4	310.6	316.9	326.3	337.0	344.5	24.2	132.9	149.2
ATA 2	(TN	SPEEU OF	SOUND	KNOTS	566.7	568.4	569.9	570.5	571.0	571.6	7,0,0	573.3	573.4	573.4	573.4	573.4	573.4	573.5	574.1	574.6	575.2	575.7	576.3	576.8	577.4	577.9	578.5	579.0	579.6	580.1	580.6	581.2	581.7	582.3	582.8
UPPER' AIR , ATA 2770050042 APACHE	TABLE 8 (CONT)	REL. HIM. DENSITY S	GM/CUBIC	METER	86.3	83.7	81.3	79.5	77.1	73.2	2.17	60.0	67.9	66.3	64.7	63.2	61.7	60.2	58.7	57.2	55.8	54.4	53.0	51.7	20.4	1.64	47.9	46.7	45.5	# # # # # # # # # # # # # # # # # # # #	43.3	45.2	41.2	1.04	39.2
	TA	REL.HIM.	PERCENT	: :																															
FEET MSL HRS MDT		TEMPERATUPE	DEWPOINT	U	ß	•	~	7	~	on a				· w	r.	ro.	ស	*		•	~	6 0	io.	6 ~ 1	.		7	1	∞	Ŧ	0	•	~	80	n
		_	AIR	۵	-61.5	-60.3	-59.5	-58.7	-58.3	-57.9	10101	-56.6	-56	-56.5	-56.5	-56.5	-26	-56.4	-56.0	-55.6	-52	-54.8	-54-3	-53.9	-53.5	-53.1	-52.7	-52.3	-51.8	-51.4	-51.0	-20.6	-50.2	-49.8	-49.3
STATION ALTITUDE 3951.40 3 OCT. 80 0630 ASCENSION NO. 42		PRESSURE		MILLIBARS	52.4	51.1	6.64	48.7	47.6	9 1	7 4 5	43.2	42.5	41.2				37.5	36.6	35.7	34.9	34.1	33.3	32.5	9.10	31.0	30.3	59.6				27.0	26.3	25.7	25.2
STATION ALTIT 3 OCT. 80 ASCENSION NO.		GEOMETRIC	ALTITUDE	MSL FEET	67500.0	0.00089	68500.0	69000-0	69500.0	70500	7.0000	71500.0	72000.0	72500.0	73000.0	73500.0	74000.0	74500.0	75000.0	75500.0	76000.0	76500.0	77000.0	77500.0	0.0000/	78500.0	79000.0	79500.0	80000.0	80500.0	81000.0	81500.0	82000.0	82500.0	83000.0

STATION ALTIT 3 OCT. 80 ASCENSION NO.	STATION ALTITUDE 3951.40 FEET MSL 3 OCT. 80 0630 HRS MDT ASCENSION NO. 42	51.40 FE	S MDT) VI	UPPER AIR LATA 2770050042 APACHE TARLE 9 (CONT	TIATA 0042 (CONT)		\$EODETI 32. 106.	GEODETIC COORDINATES 32.62700 LAT DEG 106.39352 LON DEG
				Ξ	יוברי ס				
GEOMETRIC	PRESSURE		TEMPERATUPE	REL.HUM. DENSITY		SPEED OF	WIND DATA	T.	INDEX
ALTITUDE		AIR	DEWPOINT	PERCENT	U	SOUND	DIRECTION	SPEED	0F
MSL FEET	MILLIBARS	DEGREES	MILLIBARS DEGREES CENTIGRADE	, k	METER	KNOTS	DEGREES (TN)	KNOTS	REFRACTION
83500.0	24.6	-48.9			38.2	583.4	155.2	10.2	1.000008
84000.0	24.0	-48.7			37.3	•	157.8	11.5	1.000008
84500.0	23.5	-48.5			36.4		159.3	9.5	1.000008
85000.0	22.9	-48.3			35.5	٠,	161.7	6.8	1.000008
85500.0	22.4	-48.1			34.7	•	167.5	5.0	1.000008
86000.0	21.9	-47.9			33.9	584.7	179.0	3.6	1.000008
86500.0	21.4	T-47.7			33.1	-	202 • 1	2.5	1.000007
87000.0		-47.5			32.3	•	232.4	3.4	1.000007
87500.0	20.5	-47.3			31.6		246.7	5.0	1.000007
88000.0		-47.1			30.8		254.0	9.9	1.000007
88500.0	19.5	-47.2			30.1		259.3	7.4	1.000007
89000.0	19.1	-47.3			29.5		263.5	8.3	1.000007
89500.0	18.7	-47.0			28.8		564.6	8.9	1.000006
0.00006		-46.5			28.1		261.5	8.9	1.000006
90200.0	17.8	-46.1			27.4		258.5	8.9	1.000006
91000.0		-45.7			26.7		263.7	7.6	1.000006
91500.0	17.1	-45.2			26.1		273.0	10.4	1.000006
92000.0	16.7	144.8			25.4		280.5	11.7	1.000006
92500.0	16.3	9.44-			24.8		289.9	11.9	1.000006
93000.0	15.9	L.44.7			24.3		599.6	12.2	1.000005
93500.0	15.6	0.44-			23.8		308.6	12.9	1.000005
0.00046	15.2	-45.1			23.3				1.000005
94500.0	14.9	-45.3			22.8				1.000005
95000.0	14.6	-45.5			22.3				1.000005
95500.0	14.2	-45.7			21.8	587.5			1.000005
96000.0	13.9	-45.9			21.3				1.000005

ALTITUDE 80 N NO.	ALTITUDE 3951.40 FEET 80 0630 HRS N NO. 42	T MSL S MDT	Σ	MANDATORY LEVELS 2770050042 APACHE TABLE 9	EVELS 42		GEODETIC COORDINATES 32.62700 LAT DEG 106.39352 LON DEG
	PRESSURE G	PRESSURE GEOPOTENTIAL	TEMP	TEMPERATURE	REL . HUM.	WIND DATA	DATA
	MILLIBARS	FEET	A1R Degrees	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	V SPEED V) KNOTS
	850.0	5155.	14.2	4.5	52.	161.8	10.1
	0.008	6831.	12.7	8.9	77.	183.5	7.99
	750.0	8610.	11.0	7.3	78.	290 • 8	3° C
	700.0	10498.	9.1	2.0	61.	305.5	7.5
	650.0	12502.	5.5	-9.1	34.	331.7	10.4
	0.009	14628.	٥.	-16.8	26.	345.2	16.6
	550.0	16898.	-2.8	-26.5	14.	330.2	10.9
	200.0	19355.	-7.3	-30.2	14.	348.3	15.5
	450.0	22017.	-13.4	-28.8	26.	335.6	15.3
	0.00+	24914.	-20.5	-39.1	17.	347.6	23.0
	350.0	28112.	-27.4	9.44-	18.	350.1	16.5
	300.0	31693.	-35.6			345.1	21.2
	250.0	35762.	-46.0			341.4	22.5
	200.0	40531.	-55.5			344.3	30.3
	175.0	43289.	-61.0			349.4	37.4
	150.0	46392.	-65.4			17.2	47.5
	125.0	49989	-68.8			9•4	50.1
	100.0	54351.	-73.3			327.0	35.9
	80.0	58705.	-66.3			9.2	31.7
	20.0	61377.	-63.5			24.7	25•1
	0.09	.66449	-61.6			54.5	16.3
	20.0	68205.	-59.5			21.9	16.9
	0.04	72831.	-56.5			141.5	5.1
	30.0	78864.	-52.5			307.2	10.2
	25.0	82759.	2.64-			150.6	7.5
	20.0	87545.	-47.1			253.4	6.5
	15.0	93870.	-45.3				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE HAS USED IN THE INTERPOLATION.

ALTITUDE 4(B0 N no. 268	051.00 FEET 0750 HRS	MSL MDT	SIGNIFIC 2 JAI TAB	SIGNIFICANT LEVEL DATA 2770030268 JALLEN TABLE 10	ATA.	GEODETIC COORDINATES 33.16712 LAT DEG 106.49511 LON DEG
	PRESSURE MILLIBAHS	RE GFOMETRIC ALTITUDE RS MSL FEET	TEMPE AIR DEGREES	TEMPERATURE IR DEWPOINT REES CENTIGRADE	REL.HUM. PERCENT	
	884.2	4051.0	12.2	0•9	66.0	
	874.0	4371.5	13.7	9.	54.0	
	850.0	4677.7	14.3	4 m	51.0 50.0	
	825.8	5942.2	13.0	, o	55.0	
	797.0	6920.7	11.4	6.3	71.0	
	769.2	7898.1	11.8	7.7	0.97	
	756.2		10.5	7.6	82.0	
	741.2		11.6	3.3	56.0	
	700.0	10485.8	9.6	ď	51.0	
	0.699	11717.7	7.5	-6.2	37.0	
	642.8		4.7	-7.4	41.0	
	600.2	~	9•	-17.6	24.0	
	583.4	15765.4	٠,	-24.9	13.0	
	567.0		-1.0	-27.7	11.0	
	200.0		-7.2	-28.7	16.0	
	429.0		-17.2	-35.2	19.0	
	422.0		-17.1	-37.5	15.0	
	0.004		-20.2	0.04-	15.0	
	346.6		-27.2	7.91-	14.0	
	321.6		-32-1	-50.5	14.0	
	300.0	31752.2	-35.7	,		
	250.0	35831.1	-46.7			
	227.4	37881.6	-51.0			
	212.8	39299.3	-52.5			
	200.0	40611.9	-55.3			
	160.4	45157.5	-64.2			
	150.0	46505.5	-65•6			
	141.2	_	-65.8			
	123.6		-70.1			
	107.4	53115.8	-69.5			
	100.0	54515.6	-71.0			

STATION ALTITUDE 4051.00 FEET MSL 3 OCT. 80 ASCENSION NO. 268 0750 HRS MDT

SIGNIFICANT LEVEL DATA 2770030268 JALLEN

GEODETIC COORDINATES 33.16712 LAT DEG 106.49511 LON DEG

TABLE 10 (CONT)

TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET

-73.7 -64.2 -64.9 -60.5 -63.0 -63.0 -56.2 -56.2 -56.2

56603.6 58477.7 61549.8 62798.1 63618.7 66092.3 68413.3 72645.9 76850.0

899.8 655.0 655.0 556.0 850.0 850.0 850.0

REL.HUM. PERCENT

	ASCENSION NO. 266		TINS FILE		TABLE 11			106.	106.49511 LON DEG
GEOMETRIC ALTITUDE MSL FEET	PRESSURE TEMP AIR MILLIBARS DEGREES	TEMF AIR Degrees	TEMPERATURE R DEWPOINT EES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEEU OF SOUND KNOTS	WIND DATA DIRECTION SI DEGREES(TN) K	SPEEU KNOTS	INDEX OF REFRACTION
4051.0	884.2	12.2	۸•0	66.0	1075-1	629°4	0.	0.	1.000283
4500.0	870.0	14.0	4 • 5	52.7	1051.7	661,3	183.8	2.7	1.000273
5000.0	854.4	13.9	3.7	50.3	1033.3	661.2	183.8	5.8	1.000267
5500.0	H39.1	13.4	3.8	52.2	1016.5	660.7	183.8	8.8	1.000264
6000 n	824.1	12.9	£•#	55.9	4.666	660.2	182.2	10.4	1.000261
6500.0	3	12.1	5.5	64.1	984.2	629.4	177.9	9.8	1.000261
7000.0		11.4	7.9	71.4	968.4	658.7	186.3	8.6	1.000261
7500.0	780.4	11.6	7.2	74.0	6.646	659.1	207.4	7.7	1.000259
8000.0		11.5	7.7	77.3	933.0		225.9	0.6	1.000257
8500.0	752.5	10.8	6.7	75.1	918.7	_	238.9	10.7	1.000251
0.0006		11.7	3.2	55.7	900.5		251.3	11.5	1.000236
9500.0		11.1	2.5	54.1	886.1		564.0	11.4	1.000231
10000.0		10.4	1.1	52.5	872.2		278.8	11.2	1.000226
10500.0		9.6	.	50.8	858.6		286•0	10.3	1.000220
11000.0		8.8	4.5-	45.5	846.2	655.1	291.2	9.6	1.000213
11500.0		7.9	-5.0	39.5	833.9		289.3	8.8	1.000206
12000.0	662.0	6.8	-6.5	34.0	822.2		288.0	8.2	1.000201
12500.0	649.8	S.S.	-7-1	39.9	810.8	651.0	287.2	7.5	1.000198
13000.0	•	4.2	⇒.	39.1	799.5		299.4	8.5	1.000194
13500.0	_	3.1	-11.0	34.45	788.1		311.4	10.3	1.000189
14000.0	614.3	2.0	-13.8	29.8	776.8		326.9	13.8	1.000184
14500.0	602.8	•	-16.9	25.1	765.6	645.2	334.3	16.3	1.000179
15000.0	591.5	†	-20.9	18.4	752.8		337.4	16.2	1.000174
15500.0	580.4	0:-	-25.4	12.6	739.9		338.1	15.0	1.000169
16000.0	569.5	8	-27.2	11.3	728.2	643.0	337.8	13.3	1.090166
16500.0	558.6	-1.7	-27.7	11.6	71617		344.5	13.7	1.000163
17000.0	548.0	-2.7	-27.8	12.4	705.5	640.8	349.1	14.3	1.000160
17500.0	•	-3.6	-27.9	13.1	7. 769		348.8	14.9	1.000158
18000.0		9.4-	-28.0	13.9	683.6		347.2	15.6	1.000155
18500.0	517.1	5.3	28.2	14.7	672.9	637.4	345.1	16.4	1.000153
19000.0	507.3	-6.5	-2A.5	15.4	662.4	636.3	340.5	15.1	1.000151
19500.0	497.5	-7.5	-28.9	16.1	652.2	635.1	335.1	14.2	1.000148

STATION AL	STATION ALTITUDE 4051.00 FEET 3 OCT. 80	51.00 FEE		-	UPPER AIR , AIA 2770030268 JALLEN	ATA ,8		SEODET 1	GEODETIC COORDINATES
ASCENSION NO.	NO. 268	U/SU HKS	ē Ç					106.	49511 LON DEG
				TA	TABLE 11 (C	(CONT)			
GEUME TRIC	PRESSURE	TEME	TEMPERATURE	REL.ININA. DENSITY		SPEED OF	WIND DATA	11A	INDEX
ALTITUDE		AIR		PERCENT	2	SOUND	DIRECTION	SPEED	0F
MSL FEET	MILLIBARS DEGREES	DEGREES	CENTIGRADE		METER	KNOTS	DEGREES (TN)	KNOTS	REFRACTION
20000.0	487.7	-8.8	-29.7	16.5	642.5	633.5	330.5	13.5	1.000146
20500.0	478.1	-10.1	-30.5	16.9	633.0	631.9	330.8	14.0	1.000144
21000.0	468.7	-11.4	-31.4	17.3	623.6	630.4	333.6	14.9	1.000141
21500.0	459.5	-12.7	-32.2	17.7	614.4	628.8	328.2	14.7	1.000139
22000.0	450.4	-14.0	-33-1	18.0	605.3	627.2	323.8	4.7	1.000137
22500.0	441.6	-15.3	-33.9	18.4	296.4	625.6	327.7	14.9	1.000135
23000.0	432.9	-16.6	-34.8	18.8	587.7	624.1	334.6	15.7	1.000133
23500.0	424.3	-17.1	-36.7	16.3	577.2	623.4	オ・オオの	17.4	1.000130
24000.0	415.7	-18.6	-38.2	15.0	567.4		349.1	18.6	1.000128
24500.0	407.3	-19.2	-39.5	15.0	558.5		350.6	19.1	1.000126
25000.0	399.1	-20.3	1.04-	15.0	549.8		351.5	19.4	1.000124
25500.0	390.9	-21.3	-41.1	14.8	240.6		352.2	19.5	1.000121
26000.0	382.8	-22.3	0.24-	14.7	531.7		355.1	20.5	1.000119
26500.0	374.9	-23.4	6.24-	14.5	522.8	615.8	358.0	21.0	1.000117
27000.0	367.2	-54.4	-43.9	14.4	514.2		•	21.7	1.000115
27500.0	359.7	-25.4	8.11-	14.3	505.7		2.5	22.4	1.000113
28000.0	352.3	-26.4	-45.7	14.1	497.3		3.4	22.8	1.00011
28500.0	345.0	-27.5	1.94-	14.0	489.2		3.8	22.9	1.000110
29000.0	337.7	-28.9	-47.8	14.0	481.6	_	3.8	22.9	1.000108
29500.0	330.6	-30.3	0.64-	14.0	474.2	_	3.8	23.5	1.000106
30000.0	323.6	-31.7	-50.1	14.0	6.994		Q.0	23.5	1.000104
30500.0	316.7	-32.9	-53.2	10.9**	459.2	603.9	2.3	23.8	1.000103
31000.0	309.9	0.46-	-58.5	6.6 **	451.5		, ,	24.0	1.000101
31500.0	303.3	-35.1	-67.2	2.2**	443.9	601.0	355.4	23.7	1.000099
32000.0	296.7	-36.4			436.5	599.5	350.7	23.6	1.000097
32500.0	290.1	-37.7			429.3		347.0	23.9	1.000096
33000.0	283.7	-39.1			422.5	596.0	345.0	24.3	1.000094
33500.0	277.5	4.041			415.3	594.3	346.6	25.2	1.000092
34000.0	271.3	-41.8			408.5		347.8	25.9	1.000091
34500.0	265.3	-43.1			401.8	590.9	348.5	56.6	1.000089
35000.0	259.5	いっきゃし			392.2	589.1	348.3	27.1	1.000088
35500.0	253.7	-45.8			388.8	587.4	346.8	27.2	1.000087

** AT LEAST OHE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITU 3 OCT. 80 ASCENSION NO.	.TITUDE 40:	STATION ALTITUDE "051,9% FEES MOT 3 oct. 80 ASCENSION NO. 268	爱	TA	UPPER AIR DATA 2770030268 JALLEN TABLE 11 (CONT)	JATA S8		GEODETI 33. 106.	GEODETIC COORDINATES 33.16712 LAT DEG 106.49511 LON DEG	
GEUMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMP AIR DEGREES	TEMPERATURE R DEWPOINT EES CENTIGRADE	REL.HIM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SE DEGREES(TN) KE	SPEED KNOTS	INDEX OF REFRACTION	
36000.0	248.1	-47.1			382.2	585.8	345.4	28.0	1.000085	
36500.0	242.4	-48.1			375.2	•	344.6	29.7	1.000084	
37000.0	236.9	-49.5			368.4	•	3.220	31.4	1.000082	
37500.0	231.4	-50.5			361.6	581.7	344.5	32.9	1.000081	
38000.0	226.1	-51.1			354.8		344.3	32.9	1.000079	
38500.0	220.9	-51.7			347.4	-	344.0	32.8	1.000077	
39000.0	215.8	-52.2			340.2	-	343.3	32.7	1.000076	
39500.0	210.8	-52.9			333.4	578.1	341.1	32.4	1.000074	
40000.0	205.9	-54.0			327.2		336.9	31.8	1.000073	
40500.0	201.1	-55.1			321.2		332.5	30.9	1.000072	
41000.0	196.3	-56.1		,	315.0		328.0	29.9	1.000070	
41500.0	191.6	-57.0			308.8	572.7	328.8	29.4	1.000069	
42000.0	187.0	-58.0			302.8		331.7	29.1	1.000067	
42500.0	182.5	-59.0			296.8		337.0	30.9	1.000066	
43000.0	178.1	-60.0			291.1		342.3	33.9	1.000065	
43500.0	173.8	-61.0			285.4		346.6	36.8	1.000064	
44000.0	169.7	-61.9			279.8	566.2	350.3	39.9	1.000062	
44500.0	165.6	-65.9			274.4		354.8	41.9	1.000061	
45000.0	161.6	-63.9			269.1		359.9	43.4	1.000060	
45500.0	157.7	9.49-			263.4		4.5	644.5	1.000059	
46000.0	153.8	-65.1			257.5		0•6	45.1	1.000057	
46500.0	150.0	-65.6			251.8		13.1	45.3	1.000056	
47000.0	146.3	-65.7			245.7		16.7	45.1	1.000055	
47500.0	142.7	-65.8	•		239.8		18.9	44.5	1.000053	
48000 - 0	139.2	-66.3	•		234 • 4		20.1	43.6	1.000052	
48500.0	135.7	-67.1			229.4		19.7	43.0	1.000051	
0.00064	132.3	-67.9			224.6	550.1	18.5	42.5	1.000050	
49500.0	129.1	-68.7			219.9		16.1	43.2	1.000049	
50000.0	125.8	-69.5			215.3	555.9	12.7	6.44	1.000048	
50500.0	122.7	-70.1			210.5	555,2	10.3	46.8	1.000047	
51000.0	119.6	-70.0			205.1	555.3	6.6	48.8	1.000046	
51500.0	116.6	-69.9			199.8	555.5	8.7	40.1	1.000044	

			-	IPPER ATH ATA	AIA				
STAT10N AL. 3 OCT. 80		STATION ALITINGE 4051.00 FEET MSL 3 OCT: 80 0750 HRS MRT		2770030268 JALLEN	98		SEODETI	JEODETIC COORDINATES	
ASCENSION NO.	NO. 268		11	TABLE 11 (CONT)	ONT)		106.	106.49511 LON DEG	
GE OME TRIC	PRESSURE	TEMPERATUPE	REL.HIJM. DENSITY		SPLEU OF	WIND DATA	T.	INDEX	
ALTITUDE MSL FEET	MILLIBARS	DEGREES CENTIGRADE	PERCENT	GM/CUBIC METER	SOUND KNOTS	DIRECTION DEGREES (TN)	SPEED KNOTS	OF REFRACTION	
52000.0	113.7	-69.1		194.7	555.6	9.7	45.2	1.000043	
52500.0	110.8	-69.6		189.7	555.8	10.8	40.7	1.000042	
53000.0	108.0	-69.5		184.8	555.9	7.5	36.2	1.000041	
53500.0	105.3	6.69-		180.5		3.3	31.9	1.000040	
24000.0	102.7	-70.4		176.4		358.7	30.6	1.000039	
24500.0	1001	-71.0		172.5	553.9	354.0	59.9	1.000038	
55900.0	97.5	-71.6		168.6	553.0	349.3	29.5	1.000038	
55500.0	95.1	-72.3		164.8		344.8	29.4	1.000037	
26000.0	95.6	-72.9		161.2		345.2	30.0	1.000036	
56500.0	90.3	-73.6		157.6		349.7	31.3	1.000035	
57000.0	88.0	-72.4	•	152.7		355.1	32.7	1.000034	
57500.0	85.8	-70.8		147.7		2•3	34.3	1.000033	
58000.0	83.6	-69.2		142.8		8.3	36.0	1.000032	
58500.0	81.5	-67.7		138.2		11.4	35.7	1.000031	
29000.0	79.5	-67.1		134.4		14.5	35.6	1.000030	
59500.0	77.5	-66.5		130.7		17.6	33.6	1.000029	
600 00.0	75.6	-66.0		127.2	560.8	21.1	31.5	1.000028	
60500.0	73.8	-65.4		123.7		23.9	29.3	1.000028	
61000.0	71.9	-64.8		120.3		26.3	27.0	1.000027	
61500.0	70.2	-64.3		117.0		27.5	25.3	1.000026	
62000.0	68.5	-64.5		114.3		24.1	25.3	1.000025	
62500.0	66.8	-64.7		111.6		20.7	25.4	1.000025	
63000.0	05.5	-63.8		108.4	563.7	21.9	23.5	1.000024	
63500.0	63.6	-61.1		104.5	567.3	23∙8	21.4	1.000023	
64000.0	62.0	-60.9		101.8		28.1	18.3	1.000023	
64500.0	60.5	-61.4		9.66		36.9	14.5	1.000922	
62000.0	59.1	-61.9		97.4	566.2	51.2	11.3	1 - 000022	
65500.0	57.6	+62.4		95.3		4.64	11.2	1.000021	
66000.0	56.3	-62.9		93.2		46.6	11.2	1.000021	
66500.0	24.9	-62.5		8.06		0.44	11.6	1.000020	
67000.0	53.6	-61.8		88.3		41.9	12.5	1.000020	
67500.0	52.3	-61.2		85.9	567.2	0.04	13.4	1.000019	

STATION A	STATION ALTITUDE 4051-00 FEET		_	UPPER AIR HATA	ATA,		GEODETI		
S OCT. BU ASCENSION NO.	u 140. 268	0750 HRS MDI	TA	JALLEN TABLE 11 (CONT)	ONT)		33. 106.	33.16712 LAT DEG 106.49511 LON DEG	
SE UME THIC	PRESSURE	TEMPERATURE	REL.HIM. DENSITY		SPEED OF	WIND DATA	T A	INDEX	
ALTITUDE		AIR DEWPOINT	PERCENT	U	SOUND	DIRECTION	SPEED	96	
MSL FEET	MILLIBARS	MILLIBARS DEGREES CENTIGRADE		METER	KNOTS	DEGREES (TN)	KNOTS	REFRACTION	
68000.0	51.0	-60.5		83.6	568.1	38.2	13.3	1.000019	
68500.0	8.64	-59.9		81.3	-	36.3	12.9	1.000018	
0.00069		-59.5		79.3		35.3	12.6	1.000018	
69500.0	47.5	-59.0		17.2	570.1	37.1	12.4	1.000017	
70000.0		-58.6		75.2		39.0	12.3	1.000017	
70500.0	•	-58.1		73.3		45.3	11.1	1.000016	
71000.0		-57.7		71.4		57.2	6.1	1.000016	
71500.0		-57.2		9.69		72.3	8.8	1.000015	
72000.0		-56.8		67.8		92.7	7.7	1.000015	
72500.0		-56.3	,	0.99		116.1	7.8	1.000015	
73000.0		-56.2	•	64.4		129.4	7.8	1.000014	
73500.0		-56.2		65.9		122.2	5.4	1.000014	
74000.0		-56.2		61.4	573.8	104.3	3.1	1.000014	
74500.0	37.4	-56.2		60.0	573,8	44.5	1.9	1.000013	
75000.0		-56.2		58.6		351.5	3.6	1.000013	
75500.0		-56.2		57.2		337.2	6.5	1.000013	
76000.0		-56.2		55.8		336.2	7.1	1.000012	
76500.0		-56.2		54.5	573.8	337.1	7.4	1.000012	
77000-0		-55.9		53.2	574.2	337.9	7.7	1.000012	
77500.0	32.4	-54.9		51.7	575,5	330.3	7.4	1.000012	
78000.0		-54.0		50.3		321.4	7.2	1.000011	
78500.0		-53.0		48.9		313.0	7.2	1.000011	
79000.0	30.5	-52.0		47.6		317.3	7.9	1.000011	
19500.0	29.5	-51.6		46.4		320.9	9.6	1.000010	
800000	-	-51.4		45.3				1.00001	
80500.0		-51.2		44.2				1.000010	
81000.0		-50.9		43.1	586.7			1.000010	
81500.0		-50.7		42.1	581.0			1.000009	
82000.0	26•3	-50.5		41.1	581.3			1.000009	

			•	MANDATORY LEVELS	STAN		
ON ALTITUE	ON ALTITUDE 4051.00 FEET	T MSL		2770030268	9,		SEODETIC COORDINATES
T. 80 SION NO.	268 0750 HRS	S MDT		JALLEN			33.16712 LAT DEG 106.49511 LON DEG
				TABLE 12			
	PRESSURE 6	PRESSURE GEOPOTENTIAL	TEME	TEMPERATURE	REL.HUM.	WIND DATA	ATA
			AIR	DEWPOINT	PERCFINI	DIRECTION	SPEED
	MILLIBARS	FEET	DEGREES	DEGREES CENTIGRADE		DEGREES (TN)	KNOTS
	850.0	5140.	13.7	3.5	50.	183.8	9.9
	800.0	6812.	11.6	6.1	.69	179.8	9.5
	750.0	8586.	11.0	0.9	71.	241.2	10.8
	700.0	10476.	9.b	~•	51.	285.7	10.4
	650.0	12482.	5.5	-7.1	40	287.3	7.5
	0.009	14609.	9.	-17.7	24.	335.0	16.2
	550.0	16889.	-2.5	-27.7	12.	349.2	14.2
	200.0	19348.	-7.2	-28.7	16.	336.3	**
	450.0	22007.	-14.1	-33.1	16.	324.0	L + + T
	0.004	24904.	-20.2	0.04-	15.	351.4	19.4
	350.0	28109.	-26.7	0.94-	14.	3.6	22.9
	300.0	31690.	-35.7			353.0	23.6
	250.0	35754.	-46.7			345.8	27.3
	200.0	40515.	-55.3			331.7	30.7
	175.0	43276.	60.7			345.5	36.0
	150.0	46382.	-65.6			12.9	45.3
	125.0	49992.	-69.1			12.0	#S•3
	100.0	54350.	-71.0			354.0	59.9
	90.0	58680.	-67.2			13.5	35.6
	70.0	61342.	-64.2			27.3	25.3
	0.09	64457.	-61.6			40.7	1904
	20.0	68164.	0·09-			36.8	13.0
	0.04	72775.	-56.2			129.1	7.6
	30.0	78796.	A. 17.			418.0	C d

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALU, WAS USED IN THE INTERPOLATION.